The Weather Whisper

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NWS Hosts EM Meeting

Brooke Hagenhoff, Meteorologist

What do meteorologists do when the weather is quiet? "Not much!", might come to mind first, but reality is a different story. Engaging with partners is a core part of our mission and some of our strongest partners are Emergency Managers. Like many things, COVID slowed outreach activities here but on October 4th we were able to once again welcome Emergency Managers (EMs) from across the area back to our office. We all know nothing brings people together like good food, so while enjoying some excellent pulled pork (prepared by staff!) we covered topics from communication methods and probabilistic data to event support and mutual aid. Recent large events such as the December 15th derecho and March 5th tornadoes were also discussed to examine best practices and understand ways that we can be even better prepared for the next one. Discussions were led by NWS staff, Emergency Managers, and research partners. All in all, a fantastic meeting to help rejuvenate our partnerships into the future. A big thank you to everyone that made this event such a success.

A full operations floor with our EM partners and staff. Thanks to NWS Davenport for providing service backup during the meeting!
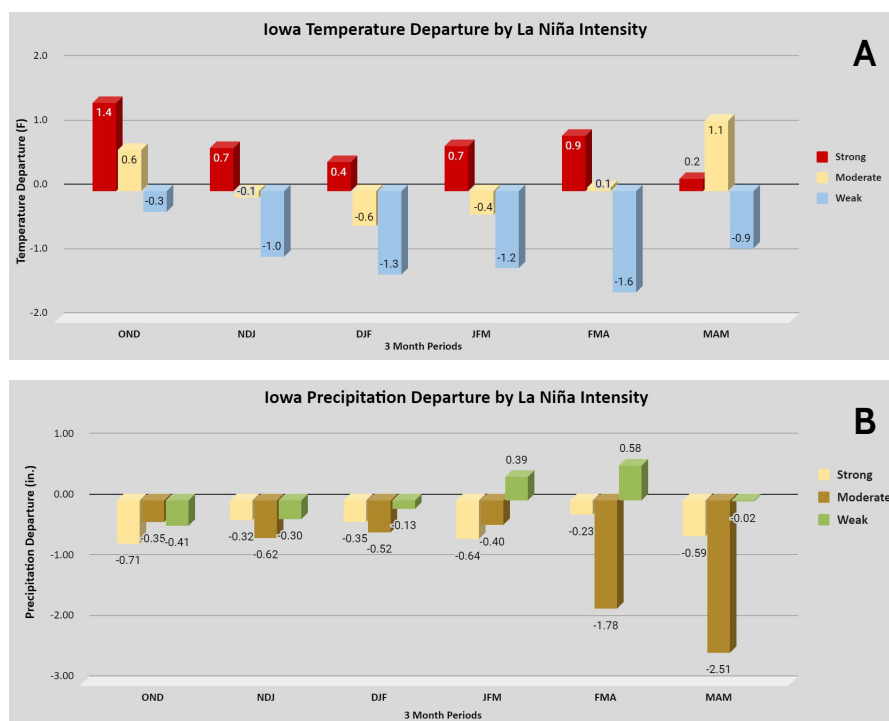
What La Niña Means for Iowa

Craig Cogil, Lead Meteorologist

La Niña conditions are currently forecast across the equatorial Pacific Ocean, characterized by below normal sea surface temperatures near the equator in the eastern and central portions of the Pacific. While these conditions exist many thousands of miles away from the central United States, impacts from La Niña may be observed in Iowa and across much of the United States. La Niña and El Niño conditions are determined by the Oceanic Niño Index (ONI). For more information on the ONI, please click here. Meeting or exceeding an ONI index of -0.5°C for five consecutive overlapping seasons is considered a La Niña.
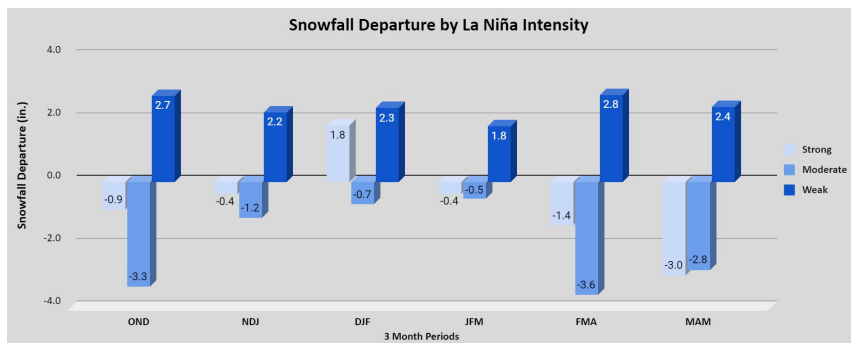
For Iowa, one of the biggest discriminators of temperature and precipitation impacts to the state is based on the intensity of La Niña. Intensity is determined by the departure magnitude of the ONI index from normal. Weak is considered a departure from -0.5 to -0.9, moderate is from -1.0 to -1.4 and strong is anything from -1.5°C or less. The following trends are the averages expected for each intensity level. Any given winter may see similar or drastically different conditions given sub-seasonal variations. So let's dig in!

Temperature departures vary considerably depending on intensity. Weak La Niña's tend to trend cooler than normal for the entire period from late fall through early spring. Moderate intensity is closer to normal but remains slightly below for much of the winter months. However, strong La Niña's typically trend warmer than normal conditions for all timeframes from fall to spring. For precipitation, all intensities suggest near

Temperature (A) and Precipitation (B) departures in Iowa, separated by the strength of La Niña.

normal to drier than normal conditions for all time periods, however there is some trend for weaker La Niña's to have slightly wetter conditions into early spring.

Finally, snowfall trends are higher in all time periods during a weak La Niña partially due to the colder temperatures that are typically seen in this regime. Snowfall is generally below normal for both moderate and

Snowfall departures in Iowa, separated by the strength of La Niña.

strong episodes although there is some tendency for slightly above normal snowfall in strong La Niña's during the winter months.

Currently, the ONI is at -0.9 and is expected to remain near that level into early winter and then slowly climb to near zero by the end of next spring. Therefore, weak to possibly moderate La Niña conditions are expected with a higher probability of those outcomes for the winter months in Iowa.

STAFF SPOTLIGHT

Alex Krull

Thunderstorm Environments, Radar Meteorology, Severe Weather Modeling

NWS Des Moines recently said farewell to Alex as he moves on to the NWS Pleasant Hill, MO office. Best of luck, Alex!

Meteorologist

5 Years

Background

Alex grew up in the south suburbs of Chicago. Watching Tom Skilling on WGN-9 Chicago is what sparked his initial interest in meteorology. In May of 2000, a violent line of storms during the overnight hours sent his family to the basement. This is the first time he recalls having to go downstairs due to severe weather. For years, Alex was told it was a microburst that went through, but after looking at the data himself, suspects it may have been a series of QLCS tornadoes, similar to the kind that occurred December 15th 2021 across Iowa.

Alex went to Valparaiso University and earned a B.S. in Meteorology, and went to University of Nebraska to complete a M.S. in Earth & Atmospheric Sciences. Since joining NWS Des Moines in September 2017, Alex has been working on a research project studying wind speed and direction in thunderstorm environments, has served on the science team to develop seasonal training for the office, and this year joined the NWS Central Region Remote Mesoanalysis team assisting other NWS offices with severe weather environment information when they are working warning operations.

On the Cover:
Full group picture from the October 4th, 2022 Emergency Manager meeting at NWS Des Moines.

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